

American Fruit Grower

WESTERN EDITION
AUGUST • 1957



PACKAGING CHERRIES
in Polyethylene Liners See page 22

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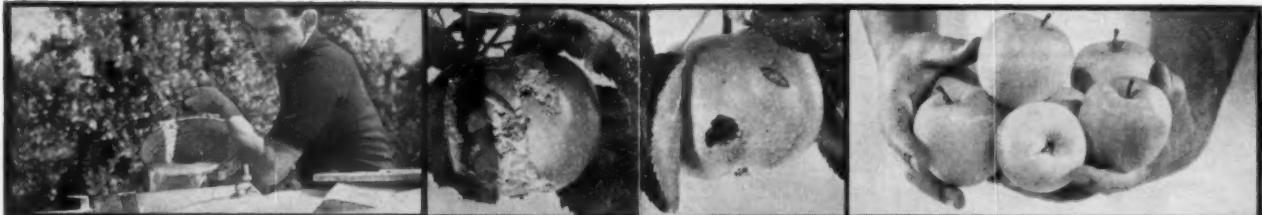
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*Miller Amendment to Public Law 518 establishes residue tolerances for insecticides. Crops carrying excess residues are subject to confiscation by the Food and Drug Administration.



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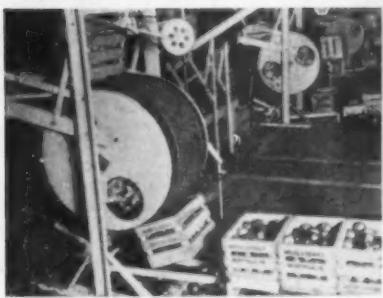
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insecticides have many uses on every kind of farm

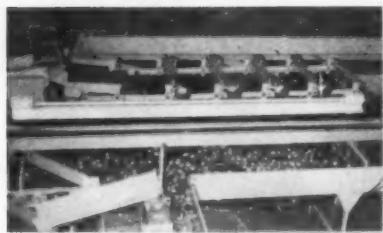
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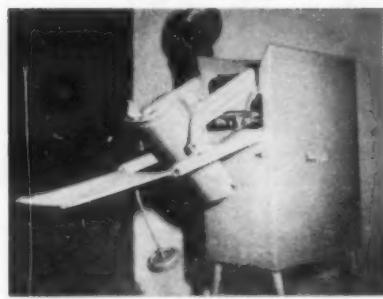
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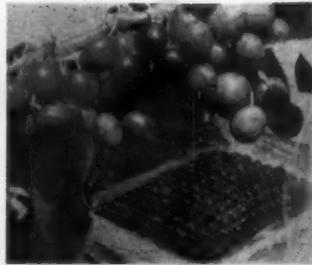
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American Fruit Grower

VOL. 77

AUGUST 1957

No. 8

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LETTERS TO THE EDITOR

Bunny Repellents

Dear Editor:

I've read in AMERICAN FRUIT GROWER where one fruit grower used lime sulfur on his trees to protect them from rodent damage and other fruit growers have tried other materials; but I have been using a positive protection from the menace of mice, deer, and rabbits—z.i.p.—made by the B. F. Goodrich Chemical Co., and available from Larvacide Products, Inc., Ringwood, Ill. or 1515 3rd St., San Francisco, Calif. This material comes in gallon cans with directions for either spraying or painting on the trees. I prefer painting and paint it from the ground up to the scaffold branches within the reach of deer.

I can guarantee its positive action and 100% prevention against damage from animals. I have used it now for 10 years without any tree injury.

Battle Creek, Mich. Charles P. Archer

Dear Editor:

I was greatly amused by a short article in AMERICAN FRUIT GROWER entitled, "Bunnies Pass Up Painted Trees."

I have good reason to remember a cold November afternoon in 1915 when as a student I painted liquid lime sulfur on the trunks of the young fruit trees then growing

in the college orchards at Iowa State College, to prevent rabbit damage. I wore cotton flannel gloves which became soaked with the lime sulfur and by night the skin had been eaten from between my fingers. That was 40 years ago!

Trees painted in November with lime sulfur would usually come through the winter with little or no damage, but often the rabbits injured them as late as early April. A second coat put on the trees on some warm day in March should be effective. But who wants to apply a material that requires more than one application a year, especially when more effective washes are available?

Personally, I am a believer in using a mechanical protector for the trunks, and if snow is apt to bury this portion of the tree, paint the upper portion with lime sulfur, alcohol resin, or any one of the new washes just recommended by the Cheyenne (Wyo.) Horticultural Field Station of the USDA. This information is found in USDA Leaflet 396 entitled, "Protecting Trees and Shrubs from Rabbit Damage."

Ames, Iowa H. E. Nichols

This booklet may be obtained by writing to the Office of Information, U. S. Department of Agriculture, Washington 25, D.C. —Ed.

CALENDAR OF COMING MEETINGS AND EXHIBITS

Aug. 13—Summer Field Day, Kansas State College horticultural farm, Manhattan.—William E. Amstutz, Sec'y, Manhattan.

Aug. 13—Peach Day, Irrigation Experiment Station, Prosser, Wash.

Aug. 13-14—Ohio Pesticide Institute annual summer meeting, Ohio Agricultural Experiment Station, Wooster.—J. D. Wilson, Sec'y, Wooster.

Aug. 14—Annual Farm Field Day, Georgetown substitution of U. of Delaware, Georgetown, Del.

Aug. 14—Maine State Pomological Society field day, Highmoor Farm, Monmouth.—Frank J. McDonald, Sec'y, Monmouth.

Aug. 15—Tree Fruit Experiment Station Field Day, Wenatchee, Wash.

Aug. 15—Ohio Orchard Day, Ohio Agricultural Experiment Station, Wooster.

Aug. 17—Cranberry-Blueberry Experiment Station Field Day, Long Beach, Wash.

Aug. 19-21—Northern Nut Growers' Association 48th annual meeting, Mansfield, Ohio.—Spencer B. Chase, Sec'y, 2338 Parkview Ave., Knoxville, Tenn.

Aug. 20-22—Minnesota Fruit Growers Association annual orchard tour, 10 a.m., Hinview Orchards (Bob Dumas) Long Lake; p.m., U. of Minnesota Fruit Breeding Farm.—J. D. Winter, Sec'y, University Farm, St. Paul, I.

Aug. 21—Grape Day, Irrigation Experiment Station, Prosser, Wash.

Aug. 21-23—Nurserymen's and Growers' Short Course, U. of Florida, Gainesville.—J. F. Cooper, Sec'y, Ag. Ext. Service, Gainesville.

Aug. 23—Orchard Day at Purdue University, Lafayette, Ind.

Aug. 23-Sept. 1—Iowa Fruit Growers Association Fruit exhibit, Iowa State Fair.—R. Glenn Raines, Sec'y, State House, Des Moines.

Aug. 26-28—United Fresh Fruit and Vegetable Association's ninth annual conference, Chase Hotel, St. Louis, Mo.—Association headquarters: 777 14th St., N.W., Washington, D.C.

Aug. 28-31—Soil Conservation Society of America 12th annual meeting, Asilomar Beach State Park, Pacific Grove, Calif. Meeting theme: Water.

Aug. 29—Rhode Island Fruit Growers Association twilight orchard meeting, Christensen's orchard.—John E. Wiggins, Sec'y, Chepachet.

Aug. 31, Sept. 1-2—Annual Grape Festival, Nauvoo, Ill.

Sept. 15-18—Produce Packaging Association 7th annual conference and exposition, Shoreham Hotel, Washington, D. C.

Sept. 16-18—Texas Citrus and Vegetable Growers and Shippers 15th annual convention, Statler-Hilton Hotel, Dallas.—Austin E. Anson, Exec. Mgr., 306 East Jackson, Harlingen.

Oct. 9-11—Florida Fruit & Vegetable Association 14th annual convention, Hotel Fontainebleau, Miami Beach.—Florida Fruit & Vegetable Assoc., 4401 E. Colonial Drive, Orlando.

Oct. 24-Nov. 2—National Apple Week.—International Apple Association, Inc., 1302 18th Street, N.W., Washington 6, D.C.

Nov. 5-6—Minnesota Fruit Growers Association and Wisconsin State Horticultural Society (western section) joint meeting, Stoddard Hotel, LaCrosse, Wis.—J. D. Winter, Sec'y, University Farm, St. Paul, I.

Nov. 12-13—Wisconsin State Horticultural Society annual convention with fruit growers' program, Rethaw Hotel, Fond du Lac.—H. J. Rahmlow, Sec'y, U. of Wisconsin, Madison.

Nov. 14-15—Western Growers Association 32nd annual convention, Hotel del Coronado, Coronado, Calif. Headquarters: 606 So. Hill St., Los Angeles 14, Calif.

Nov. 25-26—Illinois State Horticultural Society and Illinois Fruit Council annual meeting, Abraham Lincoln Hotel, Springfield.—Harold J. Hartley, Sec'y, Carbondale.

Dec. 6-7—Utah State Horticultural Society annual meeting, Hotel Utah, Salt Lake City.—Anton B. Call, Sec'y, Logan.

Dec. 9-10—Idaho State Horticultural Society 63rd annual meeting, Hotel Boise, Boise.—Anton S. Horn, Sec'y, U. of Idaho, Boise.

Jan. 7-8, 1958—North Carolina Apple Growers Association annual meeting, Skylane Hotel, Hendersonville.—R. N. Barber, Jr., Sec'y, Waynesville.

Jan. 13-15—Virginia State Horticultural Society annual meeting, Hotel Roanoke, Roanoke.—John F. Watson, Sec'y, P. O. Box 718, Staunton.

Jan. 24-25—Western Colorado Horticultural Society annual meeting, Grand Junction.—Raleigh B. Flanders, Sec'y, Box 487, Grand Junction.

Jan. 27-30—United Fresh Fruit and Vegetable Association 54th annual convention, San Francisco, Calif. Joint headquarters, Fairmont and Mark Hopkins hotels. Assn. headquarters: 777 14th St., N.W., Washington 5, D.C.

Feb. 5-7—Ohio State Horticultural Society convention, Neil House, Columbus.—C. W. Ellwood, Sec'y, Wooster.

Apr. 11-18—15th International Horticulture Congress, Nice, France.—P. Chaunier, Sec'y, 84 Rue de Grenelle, Paris, France.

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Here's New Power... New Economy for Every Grove Operation

ON every grove and orchard operation, you'll handle every job faster and better, make bigger profits, thanks to the new power and economy that are yours in the John Deere "620" Grove and Orchard Tractor. It's a big-horsepower tractor, available with an engine to burn gasoline, LP-Gas, or "farm tractor fuel."

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 Check if interested in the LP-Gas model
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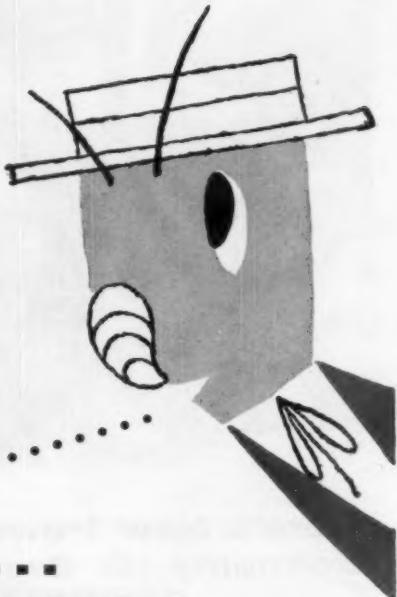
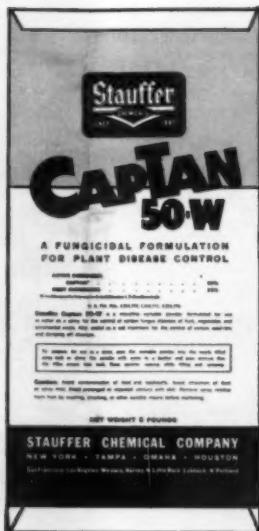
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FOR JOHN DEERE FARM EQUIPMENT"

"Any questions now, Pete?"



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from now to harvest!"**

STAUFFER'S CAPTAN 50-W gives you powerful control over secondary scab, summer rot and blotch on all varieties of apples. It also contributes to fine finish, better size and remarkable keeping quality.

And let's not forget Powdery Mildew at this season! It can hit any apple but especially Jonathan, Rome, Stayman and Cortlands. Watch for leaf and shoot infection! Cut off infected shoots and spray trees with Stauffer's Crown Brand 325-mesh Wettable Sulfur. It

weathers off within a few days and can be used with perfect safety between heat waves.

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Polyethylene bags, printed or plain, are used by most apple prepackagers. Garden State apples (left) are bagged automatically, go to market in printed poly bags (Bakelite). Stadelman Fruit Co., Zillah, Wash., uses plain poly bag (above) with Kwik Lok closure carrying printed label.

Prepackaging APPLES

By M. P. RASMUSSEN
Cornell University

IF Mrs. Consumer's demands were reflected in the operations of 274 growers, shippers and commercial repackers of about 24 million bushels of apples throughout the United States during the 1954-55 season, she wants to see apples before she buys them and she wants them put up in convenient, family-size units.

Of the 1950 crop only 9% was packed at country shipping points in

vinced that this was the answer to apple marketing problems, however, since 93 of the 274 (about one-third) did not put up any apples in small-size film or mesh bag consumer units, although all of them sold apples in some size of consumer package.

Practices were by no means uniform in all areas. In the Northeast, out of about 3 million bushels, over 28% of the fresh market supply of apples was sold in small-size consumer units, and in the Shenandoah-Cumberland area about one-fifth of over 4 million bushels was sold in this manner. In the Central area, however, almost one-third of about 870,000 bushels went into small-size consumer units. On the other hand, only about one-eighth of 9½ million bushels in the Pacific Coast states were packed by growers, shippers, or repackers in consumer-size packages.

After five or six years of freely available supplies, the polyethylene

bag seems to have come into its own. Although nine different kinds of material were used for packing small-size consumer units, polyethylene bags were by far the most popular type of package in all areas.

In the Northeast 3- and 4-pound polyethylene units were equally important, accounting for over 71% of sales of small-size consumer units. Over two-thirds of the apples packed by growers and shippers in the Central and Western areas were put up in 4-pound units. In the Shenandoah-Cumberland Valley, however, 5-pound units accounted for 96% of the small-size consumer units. Of this, about 58% were in 5-pound polyethylene bags, and over 37% were in 5-pound mesh bags.

As might be expected, costs of packaging apples in small-size consumer units at country shipping points varied widely. The major

(Continued on page 18)

This article touches on some of the findings in a study published in Cornell University Report A.E. 1038, "Packaging Apples at Country Points in Film or Mesh Bags and in Gift Packages 1954-55 Season," by Dr. M. P. Rasmussen and Mrs. Isabelle Thomas. While the supply lasts, individual copies may be obtained free by writing Dr. M. P. Rasmussen, Warren Hall, Cornell University, Ithaca, N. Y.

consumer-size units. By the time the 1954 crop had gone to market, however, the cross-section survey of grower-shippers showed them putting up 22% of total sales in small-size consumer units. Not all were con-

Consumer Packages for TREE-RIPE PEACHES

**Bruise protection, sturdiness, hydrocooling
ease, and low cost are features to look for**

By P. L. HAWTHORNE

Louisiana State University

WE in the South believe that our tree-ripe peaches are as soft, as tender, as juicy, and as high in quality as those grown anywhere in the country. Therefore, if a container or tray proves satisfactory for our needs, it should be adaptable to other areas.

The problem of selecting a good, yet inexpensive tray for prepackaging peaches has been studied closely in Louisiana. The following evaluation of several types of consumer tray cartons is based on our findings.

The 6- and 8-fruit Alford Fanci-Pak tray was probably the most acceptable consumer unit package studied. A cardboard center partition gives additional bruise protection to the fruit and strength to the package. The fruit cells are built into this carton and are not a separate unit requiring additional labor to assemble, as did the other eight peach trays studied. These built-in cells prevent the fruits from turning or falling from the packed container. Ample provisions are made for forced air cooling of fruits packed in this tray.

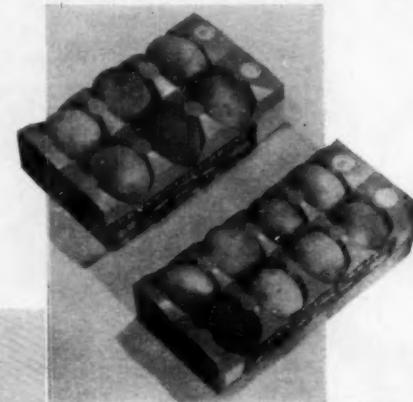
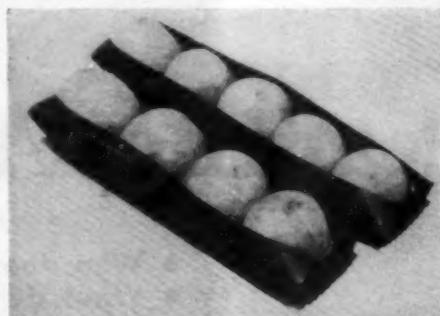
Field heat was removed from fruit packed in the Fanci-Pak tray in a shorter time than with the other trays studied. Additional cost of prepackaging peaches in this type of tray was about 2 cents per pound above the cost of packing in the Louisiana cell peach box.

The 8-peach window carton is also a very attractive package. It allows for full vision of nearly all of the fruits and provides ample strength for average handling by shed labor. Precooling fruits to be packed in this carton is not so essential as in the completely overwrapped tray pack because two round apertures are located on each side of this carton for ventilation. However, an open type master container similar to the Louisiana wirebound peach box or the Louisiana cell box is essential for faster fruit cooling after packaging.

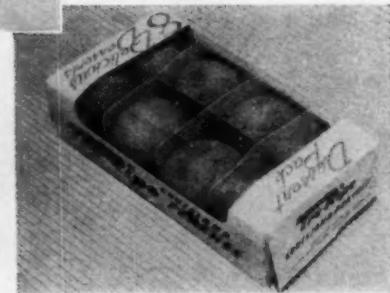
This type of package is acceptable

by the retail trade in Louisiana. However, the additional cost of about 5 cents per pound over the cost of packing in the cell-type container will limit its use for peaches.

The Bailey Pack possesses more of the desirable qualities necessary for acceptance as a 4-peach tray than other 4-fruit trays included in the



Some good consumer packages for peaches: Alford Fanci-Pak (above); Bailey Pack (left); 8-fruit window carton (below).



Left — Consumer approval is quick for tray-packed peaches.

test. It is attractive when filled with highly colored ripe peaches. The contour bottom of this open tray may be objectionable because the packed trays have a tendency to roll or turn more than packed flat-bottom trays.

There are no partitions between fruits in this tray, but there was very little fruit bruising. A tight adhesive

label or price band around the center of the packed tray held it so firmly that the peaches could not fall out when the packed tray was turned upside down. This is a decided advantage over the flat-bottom tray pack. This band helped to prevent fruit bruising in the tray by holding (Continued on page 20)

YOUR ROADSIDE MARKET

Is It Making Money For You?

Research reveals factors which play important roles in boosting the sales volume of direct producer-consumer marketing

By E. EVAN BROWN and W. FRED CHAPMAN, JR.

Clemson Agricultural College

IMPROVED highways and a rapid increase in the volume of automobile traffic has encouraged direct producer - consumer marketing by means of roadside markets. Thousands of farm families have found it both practical and profitable to market all or a part of their farm products from their own roadside stands.

Location of roadside markets has generally been considered important insofar as sales volume is concerned. The factors which affect sales are:

side of the road entering a town had average sales of \$233, as compared with \$148 for stands on the left side.

Other factors thought to affect sales



1) distance the market is located from the nearest town, and 2) side of the road on which the market is located.

Data obtained during a research program at Clemson (S.C.) College reveal that markets located less than 5 miles from a town were found to be doing nearly twice the volume of business as those located 5 miles or more from a town. Average weekly sales for markets located less than 5 miles from the nearest town were over \$242. Markets located 5 miles or more from a town averaged only \$129. Markets located on the right

are: 1) length of time the market has been operated; 2) number and variety of products sold; 3) pricing practices; 4) advertising; and 5) market appearance.

According to the Clemson study, markets having gross sales of \$100 weekly or more had been in business 5.9 years compared with only 4.4 years for markets having sales of less than \$100. Markets operating for four years or more had a minimum of 100% higher weekly sales than those which had been operated three years or less.

The average number of items sold per market was nearly the same for markets with weekly gross sales of less than \$100 as for markets having sales of \$100 or more. This means that the number of items sold did not affect sales. To a large extent, this is



Consumer confidence in local-grown produce sold at roadside stands is fostered by the Massachusetts Fruit Growers' Association, which has established a Code of Ethics. Operators meeting standards may display an Approved Farm Stand sign.

Appearance of your market structure is the key to achieving good sales levels, especially in attracting tourists. The stand shown above with its neat display of products has a cash register and accurate scales handy for quick sales. Parking is provided near the stand.

thought to be due to the emphasis on peach and apple sales at those markets handling only a few products. Sales at markets selling only vegetables were apparently related to the number and varieties of vegetables sold.

On the basis of available data, it appears that sales volume was greater at those markets where prices were no higher than in nearby retail stores. A larger proportion of the bigger markets priced products slightly below local retail prices than did the smaller markets. Of the roadside markets surveyed, 28% priced products below local retail prices, 67% priced products the same as at local outlets, and

(Continued on page 29)



Carlot shipments of California table grapes will be going to eastern markets this year in colorful 2-pound trays overwrapped with cellophane, after successful test shipments last year.

Prepackaging TABLE GRAPES

Two-pound tray with cellophane overwrap reduces spoilage, wins consumer approval

TEST shipments last August of their Lark brand table grapes in 2-pound trays proved so encouraging that L. R. Hamilton, Inc., growers and packers in Reedley, Calif., plan to make carlot shipments this year.

In commenting on the use of consumer-type packages, William A. Hamilton, secretary and sales manager, says, "Major advantages of packaged over bulk sales are increased sanitation, reduced spoilage, less damage from abusive consumer handling, and lower labor costs at store level."

The colorful end product of the Hamilton firm—quality grapes on a purple and chartreuse colored tray—is the result of control over its product in all stages.

Lark brand grapes are picked and then loaded onto trucks in the field

by conveyor. Fork lifts remove the pallets of field boxes from the trucks and set them on the floor of the packing house. Use of fork lifts and pallets in the packing house, too, reduces bruising and saves labor.

The grapes are given a sulfur dioxide treatment in the packing house to prevent development of mold. They are then placed in a precooling room to remove field heat in order to insure longer and brighter shelf life.

The treated fruit can be prepackaged the following day, or as much as 4,200,000 pounds can be held in the storage plant for packaging after the harvesting season, from November until as late as March, depending on market and demand.

The grapes are packaged in a refrigerated room held at 45° F. This

refrigeration prevents fluctuation in fruit temperature, thereby eliminating condensation on the grapes during packing and reducing condensation in the package on arrival at destination.

On each of the two lines of packers are 18 girls whose output per day is at least four carloads. Grape trays are set up automatically at a predetermined rate of speed by Standard's Tripl-Tite erecting machine (made by Standard Folding Trays Corp., Jackson Heights, N.Y., who also supply the trays).

The empty trays are conveyed to the packers, who remove grapes from the field boxes, grade and trim out substandard fruit, and put at least 2 pounds in each tray. Filled trays are carried by conveyor to checking stations.

A Hayssen wrapping machine (Hayssen Manufacturing Co., Sheboygan, Wis.) overwraps the filled trays with 18 inch Avisco 450 DS B cellophane (American Viscose Corp., Film Division, Philadelphia, Pa.).

Precooled to 32° F. before packaging, the grapes are loaded into refrigerated railroad cars or trucks for the nine-day trip East.

"Those who have prepackaged grapes at shipping point in this experimental stage for the past two seasons have found it necessary to charge about 2½ cents per pound premium compared to bulk sales," explains Hamilton. However, with slightly less cost in material and mechanization possibilities, along with resulting production speeds, it is expected this premium will be reduced.

Costs are being reduced by shipping a dozen of the 2-pound consumer units in a corrugated master container (Kieckhefer Container Co., Camden, N.J.) since the carton lends itself well to automatic case loading and sealing.

"If all goes as expected," Hamilton reports, "our firm plans to package more than 60 to 70% of its grapes in the future. We also have plans to expand our consumer packaging operation to include tree fruits, such as plums and nectarines." THE END.



Tray setup machine on left feeds empty trays onto top part of double conveyor. Filled trays come to the girl, who check-weights package before it is sent to wrapping machine.



Twelve of the 2-pound trays are packed in corrugated master container. The operator above is feeding master containers to the case loader.



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Styrofoam®—Pomona Fruit Farms**

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"Styrofoam® insulation contributes greatly to our highly successful operation. We have found it far more effective than other materials because of superior insulating qualities

at much lower cost per square yard. And Styrofoam is easy to install because of the very lightweight boards, which can be readily cut to any size, yet retain high structural strength."

Let a Styrofoam distributor help with your next insulation project. Many distributors have better than a decade of experience with Styrofoam backed by Dow research and technical aid. THE DOW CHEMICAL COMPANY, Midland, Michigan, Department PL1728L.

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A				*	*		*			
B	*				*				*	
C	*				*					

YOU CAN DEPEND ON



State



NEWS

- New Georgia Peach Co-op Markets Under Blue Goose Trademark
- Hoosier Growers—and Dentists—to Push Apples During State Fair Time

Choose Blue Goose

GEORGIA—The Pine Mountain Peach Growers Association, Woodbury, newly organized co-operative of second and third generation peach growers, selected as its exclusive marketing agent American National Growers Corporation (eastern division). The corporation is affiliated with American National Foods, Inc., distributors of more than 45 fruits and vegetables under the Blue Goose trademark. Shipments of the new co-op are going to market under the Blue Goose Pine Mountain and Magic Hill labels and were expected to total 350 cars for the 1957 season.

Modern William Tell

INDIANA—Apples and dental health, particularly of youngsters, will be promoted in a clever manner during state fair week, August 28-September 5. In celebration of its centennial at that time, the Dental Health Division of the Indiana State Board of Health will set up an exhibit at the fair featuring a target at which youngsters will shoot a rubber-tipped dart. A sure hit will trigger a prize to the sharpshooter. The Indiana Fruit Promotion Fund will supply the apples to be used with the exhibit. The variety? It looks now as if the good doctors will be supplied with the Fenton, a new variety attaining popularity in the Midwest.—*G. A. Adrain, Sec'y, Indianapolis.*

Small Fruits Course by Mail

PENNSYLVANIA—A course by mail on the production and marketing of small fruits—strawberries and raspberries, blackberries and blueberries, currants and gooseberries, and grapes—is being offered by Pennsylvania State University. The course is free to residents of Pennsylvania; 25 cents per lesson to those living elsewhere. No university credit is given for the course. Write to Farm Study Courses, University Park, Pa., for enrollment.



THE NEW REDWIN PEACH

Homer Kemp of Bountiful Ridge Nurseries, Princess Anne, Md., shows in picture above a comparison of Cardinal peaches on left and Dixiepeaches on right with his new Redwin variety. The photo, taken in June, of a two-year-old tree in New Jersey, dramatically shows the earliness of the new peach variety. Redwin originated as a sport of Ery-Red-Fre. It is similar to Ery-Red-Fre in every way except that it can be marketed about three weeks earlier. It must be classified as a semi-cling under most growing conditions. Its large size, beautiful coloring, and exceptionally fine quality indicate that it will be as good for shipping and home market as is Ery-Red-Fre.

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PROMOTING THE QUEEN OF FRUITS

Promotional efforts of National Peach Council this year include this attractive banner printed in full color on 15½ x 22½-inch enamel stock. The banner is available at cost, 7.8 cents each. In lots of 500 or more, it can be imprinted with firm name, state name, or organization name at no extra cost. Plain banners can be ordered in any number. Send orders to National Peach Council, 302 W. Walnut St., Carbondale, Ill.

Names Make News in Florida

FLORIDA—Jasper Joiner who was assistant horticulturist with the Florida Agricultural Extension Service for four years is now assistant professor of horticulture at University of Florida.

Marshall H. Edwards, owner and operator of a 250-acre citrus grove at Bartow, has been appointed by President Eisenhower to another six-year term on the Federal Farm Credit Board.

Robert E. Norris, of Tavares, is the new president of Florida State Horticultural Society. Other officers: Dr. Ernest L. Spencer, of Bradenton, secretary; and R. R. Reed, of Tampa, treasurer.

Thirty-year-old Albert Carlton, of Wauchula, was named to succeed Judge Clyde Maddox, also of Wauchula, on the board of directors of Florida Citrus Mutual. Carlton has 70 acres in orange groves in Hardee County.

Phil C. Peters, of Winter Garden, has been re-elected to serve his second consecutive term as president and chairman of the board of Florida Citrus Exchange.

Hope for Pear Growers

OHIO—New developments in the control of fire blight may help to re-establish the pear industry in the Buckeye state which has been steadily declining for the last quarter century. These developments are covered in a new bulletin, "Growing Pears in Ohio," by J. Vernon Patterson, Ohio State University extension horticulturist.

Copies of the bulletin, which also discusses all phases of growing pears, from planting of the trees to harvesting and marketing of the fruit, are available at county extension offices.

Krezdorn Leaves Texas

TEXAS—Dr. A. H. Krezdorn has resigned from the horticulture department of A&M College and has accepted a similar position in Florida. Dr. Krezdorn also served as secretary of the Texas Pecan Growers Association.

The "Barry" Apple

NEW YORK—"Barry" is the name of New York State Experiment Station's latest apple introduction. A fall variety, it ripens about two weeks ahead of McIntosh, filling the gap between that variety and Early McIntosh.

A limited supply of trees of the Barry will be available this fall from New York State Fruit Testing Association, Geneva.

Oscar Knebel, 87, retired West Webster fruit grower, died recently. He was associated for a time with the Elwanger and Barry and Charles Little nurseries and did the initial budding of the first 10,000 Drake apple trees, a new variety at that time.

Revenue Down, Prices Up

LOUISIANA—The 1957 strawberry crop revenue was more than a million dollars less than that of 1956 even though this season's average price was higher. Final report of the season made by the State News Service shows the average price for 1957 per 24-pint crate was \$6.12; for 1956, \$5.70. Estimated 1957 production—1,025,000 crates. Gross value of fresh shipments—\$3,700,580, a drop of more than \$1.3 million from 1956 sales.

Reasons for the decrease in revenue in 1957: production from only 8500 acres—1600 acres below 1949-55 average; less yield—119 crates of 24 pints each per acre compared with the near-record yield of 158 crates in 1956; total shipment of 873 car-loads of fresh strawberries—a decrease of 425 cars of fresh shipments from the 1956 marketings and 353 cars below the previous 10-year average; an extremely light volume of stemmed berries.

Total receipts at processing plants amounted to 199,722 pounds for the 1957 season compared with 3,859,728 pounds in 1956. Value of sales for stemmed berries totaled about \$20,000 for the season; last year's estimated worth was \$597,000.



TRAY-PACKED APPLE CARTONS

Inspecting apple cartons featuring Keyes or Friday trays are Jere White (left), manager of Jersey Fruit Co-operative Association, Inc., of Riverton, N.J., and Thomas S. DeCes, vice-president. The "telescope"-style container is cheaper than other designs used by the association several years ago and is more practical for storage and shipment, because of its double wall. When empty, the retailer has two cartons for the use of the shopper.

AMERICAN FRUIT GROWER

Bird, Deer, Mite Trouble

MARYLAND—Growers had plenty of help in the cherry harvest in early July, as every kind of bird that flew seemed to be cherry-hungry. This bird problem is not usually a factor except in very dry weather when moisture is best found in the fruits and the birds know it.

The damage being done to trees by deer is getting to be a real problem. Some growers think the deer are getting better protection than the growers.

The sudden appearance of mites in apple tree tops, and the observation that chemical thinning is not too good in the tree tops, may indicate that we may have to go back to "topping" trees with pressure sprayers to make sure of coverage.—*A. F. Vierheller, Sec'y, College Park.*

CHANGES IN CO-OP PERSONNEL

W. J. KLOTZBACH, formerly executive secretary of Western New York Apple Growers Association, became general manager of Cherry Growers, Inc., Traverse City, Mich., on July 1. He succeeded A. J. Rogers, who had been with the co-operative—large processors of red tart cherries and frozen apple slices—for 30 years.

FRED P. COREY, formerly associate Monroe County (N.Y.) agricultural agent, is the new executive secretary of Western New York Apple Growers Association, Rochester. He will also act in the same capacity for the New York Cherry Growers Association.

Berry Acreage Up

CALIFORNIA—Strawberry acreage this year is expected to total 20,700 acres, an increase of 9% over last year. Principal acreage increase occurred in the Salinas-Watsonville area, where 9800 acres are being grown compared with 7900 last year.

The prune crop is expected to reach 170,000 dried tons, according to industry leaders and fieldmen. Weather conditions have been favorable for growth and general tree health.—*Neale Leslie.*

Nut Grower Honored

OREGON—Moses P. Adams, who for 18 years served as manager of the Salem Nut Growers Co-operative, was honored on his 84th birthday by the Men's Garden Clubs of America. The club presented Mr. Adams with a Certificate of Merit in recognition of his work in "improving the walnut and introduction of the Adams walnut without restrictions." In 1952 Mr. Adams relinquished the variety to the Oregon Experiment Station for further testing. It was released to the public in 1955.

Biggest yield from the tree was three years ago when Mr. Adams got 192 pounds of dried nuts, 78% of which graded jumbo size.—*Harold and Little Larsen.*

PRICE SET FOR RED TART CHERRIES

The newly organized Great Lakes Cherry Producers Marketing Co-operative, Inc., has set a growers' price of 8½ cents a pound for the 1957 red tart cherry crop. This is practically the same price growers received last year.

Twilight Meetings

RHODE ISLAND—The first twilight orchard meeting of Rhode Island Fruit Growers Association was held at the orchard of Sayles Enoch and Phillips Steere, Chepachet. A tour of the orchard showed a fine apple crop—the result of correct orchard care.—*E. Wiggins, Sec'y, Chepachet.*

Jerseyville Popular

NEW JERSEY—Strawberry crop was good; average price good. Jerseybelle is becoming more popular because of attractive appearance, large size, and good shipping qualities.

Blueberry crop is estimated at about 2 million 12-pint flats which is less than normal. Reduction is due to winter injury to fruit buds and, in some areas, hot, dry

weather. New varieties Earliblue, Blueray, Bluecrop, Berkeley, and Coville are gaining in popularity.

Peach harvest began July 1 with Sunrise. If season follows on schedule, the important varieties Sunhigh, Triogem, and Newday should come in about August 1, with Blake, Summercrest, and Elberta due August 15 to 25. Peach canker and bacterial spot are severe.

Fall and winter apple crop as of July 1 was in good condition. Fire blight in apples is more prevalent than anticipated.—*E. G. Christ, Sec'y, New Brunswick.*

Traffic Association

CONNECTICUT—Fifteen apple growers who formed the Connecticut Fruit Traffic Association have been benefitting from bi-weekly meetings during which they exchange market sales information, which includes complete terms of each sale made the previous week. A weekly bulletin also is issued to members which lists type of buyer and destination; number and type of packages; price per unit; grade, size, and color; variety; condition; and market tone. The part-time services of a marketing specialist are proving very helpful.—*Dana G. Dalrymple.*

Blue Strawberry Growers

TENNESSEE—Strawberry growers took a beating this year on both fresh and processed berries. This is having a refining effect on the industry by eliminating marginal acreages and intensifying cultural practices by the more solid producers.

The short apple crop (60-65% normal) is almost clean of scab and insect pests,

INTERESTED IN VEGETABLES?

The Vegetable Growers Association of America has issued its annual report for 1956. The report contains the papers presented during the association's annual meeting held in Grand Rapids last December and serves as an important source of up-to-date information on vegetable growing and marketing. Single copies of the 200-page report are \$2.00 each or are available on a continuous yearly basis through an Educational Membership. Send orders to Vegetable Growers Association of America, 528 Mills Bldg., 17th and Pennsylvania Ave. N.W., Washington 6, D.C.

despite almost a full year of rainfall in the first half of the year. The peach crop is clean and well-sized, too. I believe we can credit the effectiveness of the new pesticides for making it possible to produce fruits of excellent quality under extremely adverse weather conditions.—*A. N. Pratt, Sec'y, Nashville.*

Lots of Peaches!

VIRGINIA—Peach crop estimate: 1,700,000 bushels. The largest since 1952!

Dessert varieties predominate in this year's apple crop, estimated about average size. Last year's crop was strong to processing varieties.

A. R. Seaman, of Roseland, and E. B. Bonham, of Chilhowie, were appointed by Commissioner of Agriculture Parke C. Brinkley to the Virginia State Apple Commission. They succeed Roy McClanahan and J. B. Bonham.—*John F. Watson, Sec'y, Staunton.*

Crop Notes

IOWA—Frequent welcome rains; irregular spraying because of wet conditions; fire blight and scab showing up as a result; apple and cherry set good; few peaches. **WISCONSIN**—Smaller apple crop than in past two years due to frost in certain areas, poor pollinating weather in others. **MINNESOTA**—Estimated commercial apple crop 235,000 bushels, about 10% under last year but 20% above 10-year average.

THE QUESTION BOX

Don't be perplexed! Send us your questions—no matter how big or small. A three-cent stamp will bring you an early reply. Address: The Question Box, AMERICAN FRUIT GROWER, Willoughby, Ohio.

CELL CARTONS

On page 26 of the December issue is an illustration showing apples packed in cell cartons. I would like the address of the company which makes this box.—*Illinois.*

The Republic Container Corp., Jersey City, N.J. Other manufacturers of cell cartons are Gaylord Container Corp., 111 North Fourth St., St. Louis 2, Mo.; Alford Cartons, Div. of Continental Paper Co., Ridgefield Park, N.J.; and Continental Box Co., 2324 Maury, Houston, Tex.

SUMMER APPLES FOR ILLINOIS

What varieties of summer apple would you recommend for my area? I would like an apple of good size which colors well and bears either very early or around August 1. Also, please advise where I can obtain the young trees of varieties you suggest.—*Illinois.*

We have found some very interesting information for our reader. C. L. Burkholder of Purdue thinks that the Fenton is the most promising summer apple variety that he has come across in the last 30 years. It ripens about August 1 in southern Indiana. Trees are available from Emlong Nursery, Stevensville, Mich.

Paul Stark, Jr., of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo., says that he would definitely plant Stark Earliest which is highly colored, of excellent flavor, and ripens early in the season. He also recommends Stark Earliblaze as a very promising new summer red apple, and Beacon, Stark Red Wealthy, Stark Jon-Grimes, Stark Summer Delicious.

J. C. McDaniel of the University of Illinois states that the St. Clair apple, propagated by Louis Gerardi Nursery, Rt. 1, Caseyville, Ill., would be worth a trial. He says it should ripen about July 20 to early August, is brightly colored with red over yellow (almost all red in the sun) and is one of the handsomest apples he's seen. He also recommends the Jefferis Red, propagated by Dintelmann Nursery, State Street Rd., Belleville, Ill.

CRUSHED OATS BAITS FOR RODENTS

Where can I obtain the crushed oats bait for rodent control recommended by the Fish & Wildlife Service?—*New York.*

Write to the District Agent, U. S. Fish & Wildlife Service, 59 Temple Place, Boston 11, Mass.

BIRD REPELLENT

What can I do to discourage birds in my orchard, especially blue jays? As soon as the fruits get any size, the birds pick holes in them.—*Oklahoma.*

We sent our reader a folder by the Fish and Wildlife Service which suggests a "rope firecracker" to protect against damage. For a copy write U. S. Department of Interior, Fish & Wildlife Service, Washington, D. C., and request Wildlife Leaflet No. 365.

WOOD CHIPS BULLETIN

I recently saw mention of a bulletin on using wood chips in the orchard but I have misplaced the issue telling about it. Would you let me know where I can obtain the bulletin?—*Wisconsin.*

The bulletin is "Wood Chips for the Land" which is available from the Superintendent of Documents, Government Printing Office, Washington, D. C. Ask for Conservation Leaflet No. 323 and send 5 cents in coin.



NEW F-600 HUSKY FARM WORK HORSE

Ford's popular 2-tonner now offered with a choice of five wheelbases for bodies up to 19 feet. GVW up to 19,500 pounds. Choice of three Short Stroke engines, up to 181 hp!

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America's biggest $\frac{3}{4}$ -ton pickup body—standard at no extra cost! It's as handy as it's handsome: a double-duty beauty that works the whole day round... that's really a pleasure to drive to town!

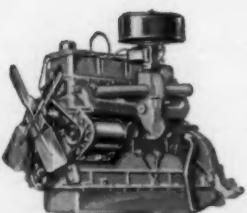
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Largest Loadspace—Styleside bodies give more loadspace than any pickup, standard at no extra cost! 6 $\frac{1}{2}$ - or 8-ft. lengths available!



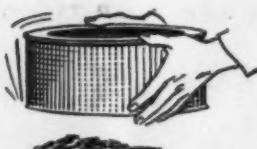
New Cab Comfort—All-new Driverized cab with new visibility, new Hi-Dri ventilation, new inboard cab step, modern suspended pedals!



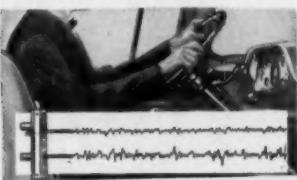
New Power Advances—Higher compression, freer breathing, stronger camshafts! Only Ford offers a Short Stroke Six as well as V-8!



Greater Body Strength—Welded all-steel construction! Husky "wrap-around" rear corners with box-section corner reinforcements!



Longer Engine Life—Super Filter air cleaner stops 90% of abrasive dirt that conventional cleaners miss! Reusable filter is easy to clean!



New Smoother Ride—Ride tests show that Ford's new suspension gives a ride that's mighty close to that of a passenger car!



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Whatever your acreage, whatever you grow, you're way ahead with modern Ford Farm Trucks. Ahead because they give you more and *do* more . . . ahead because they cost you less!

Ford's new half-ton pickup with Styleside body is a good example. The sides of the body extend to the sides of the cab, providing 23% more load-space than any 6½- or 7-footers—and the Styleside is standard at no extra cost! There's a roomier, all-new Driverized cab for greater comfort, plus a new suspension that gives you a ride mighty close

to that of a passenger car! Engine advances, too!

And even with all these "extras," Ford Trucks actually *cost less*. First cost is low. Modern Short Stroke engines are designed for low running cost. Resale value is traditionally high. And an independent study of over 10 million trucks proves Ford Trucks last longer!

On every job around the farm, in the field or on the highway, modern Ford Trucks do more . . . to cost you less! Call your local Ford Dealer for a demonstration ride!

THE BIG FLEETS BUY MORE FORD TRUCKS THAN ANY OTHER MAKE

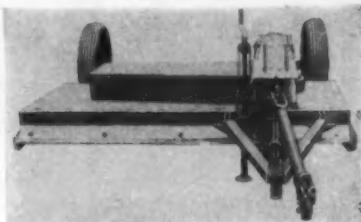
FORD TRUCKS COST LESS

...LESS TO OWN

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...LAST LONGER, TOO!

"A real 'find' for prunings disposal"



Mr. Albert J. Livezey of Barnesville, Ohio, says of his 80" Wood's Rotary Cutter, "We have no exact record of time saved but we feel that at least half is saved. While we have had only one season's experience, we feel that for brush disposal in the orchard it is one of the 'finds' of our day. We have never, I believe, found anything about which we are so enthusiastic. Its use is not limited to brush removal. It's the 'cat's meow' for all orchard mowing."

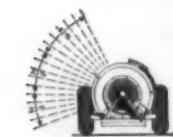
12 MODELS—42" to 114" Cut

42" under-mounted for Farmall Cub, Lo-Boy, Super A, 100, A-C G, M-H Pony and Pacer, 42" rear-mounted for Fast-Hitch Cub and Lo-Boy, 61" and 80" rear-mounted for Fast-Hitch Farmalls Super C, H, M, 200, 300, 400, I-300 (all use 3 pt. adapter), and all standard 3-point hitch tractors (Ford, Ferguson, Oliver Super 55, etc.). 61", 80", and 114" drawbar pull-types for any 2, 2-3, and 3-4 plow tractors. 80" offset model (2-3 plow) for working under trees. All have free-swinging, quick-detachable blades.

B

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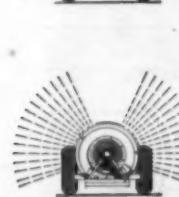
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National Apple Institute Shows

How Growers Work Together

Effective national force aids state and regional marketing groups

By R. T. MEISTER

Editor

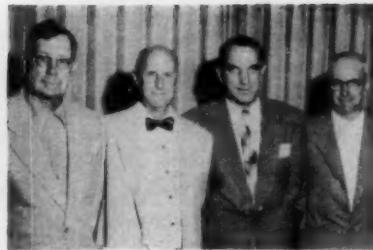
A LOOK at how apple growers effectively work together to sell their crop could benefit other perishable farm-commodity groups. Peach growers, potato producers, and even citrus growers could well take a leaf from the apple book.

Through the National Apple Institute, state and regional apple groups are welded together in an effective national force. Washington growers, with their million-dollar budget, work side by side with little Rhode Island to promote apples on a national basis.

The institute held its 23rd annual meeting in June at St. Joseph, Mich. A total of 215 delegates from 23 states guesstimated the size of this year's crop at about average or approximately 110 million bushels.

Study Problems

Among problems studied were conditions affecting market prospects, trends in individual and pooled vol-



New officers of National Apple Institute are (left to right) Patterson Bain, McBaine, Mo., treasurer; C. B. Lewis, Riverton, N.J., chairman of the board of directors and retiring president; Desmond Shearer, Tieton, Wash., president; Ralph Foreman, Northville, Mich., secretary; Ben Drew of Westford, Mass., the vice-president, is not pictured in the group.

ume-selling, lengthening the apple marketing season, apple sales management, research on health values of the apple, and national promotional program and budget.

One could not leave the meeting without the feeling that apple growers are continually learning and perfecting new ways and techniques of promoting and selling their crop. Far from being at the mercy of the market, apple growers are learning how to exploit their market.

Delegates recommended and approved a total national promotional program budget of \$116,000, nearly doubling last year's figure. As part of this project, a new staff member of the institute will devote his full time to consumer publicity. This step provides for production of tie-in materials and aids for use in local, state, and regional programs. THE END.

PREPACKAGING APPLES

(Continued from page 9)

costs were, of course, for labor in packaging, for the consumer container in which packed, and for the master container in which the consumer-size units were shipped to market. It made a big difference whether plain or printed polyethylene bags were used; whether they were bought in 5000 or 10,000 lots or a million at a time; whether new or used master containers were used, and whether the apples were packed by hand or with the help of automatic machinery.

Reports from 93 growers or shippers indicate that plain 3-pound polyethylene bags ranged from \$10 to \$25 per thousand and averaged about 18½ cents per bushel. For plain 4-pound polyethylene bags, costs per thousand ranged from \$12 to \$25 and averaged about 15½ cents per bushel. Comparable figures for plain 5-pound polyethylene bags showed a range from \$13.69 to \$26.50 per thousand, and an average cost of 13.7 cents per bushel.

If printed "poly" bags were used, costs for 3-pound bags averaged

about 27 cents per bushel; for 4-pound bags about 25 cents per bushel; and for 5-pound bags about 22 cents per bushel.

Use of Inserts in Bags

Many growers and shippers inserted printed or mimeographed cards or slips of paper in the bags to describe the contents. Some were printed in color, and some in black and white. They ranged from 50 cents to \$10 per thousand and averaged slightly more than one-fifth of a cent per consumer-size bag.

The major types of closures used were scotch tape, "twistems," staples, and "Kwik Loks." Average costs per 1000 for each were as follows:

Tape (Scotch or sensitized)	\$.75
"Twistems"	.78
Staples (metal rings, plastic and clamps)	1.57
"Kwik Loks" (mostly printed)	3.32

Most growers used plain corrugated or fiberboard master cartons (175-to-275-pound test) ranging in cost from 14 to 62 cents. For new master containers holding 24 to 27 pounds, the average cost was 21 cents

per carton. Those holding 30 to 32 pounds averaged 25 cents per carton, while those holding 36 to 40 or 45 to 48 pounds averaged 29 cents. Between individuals, these costs showed a wide range. For example, grower-shippers in the Central area paid from 21 to 62 cents for a master carton holding 36 to 40 pounds.

Because they serviced retail stores directly, a number of grower-shippers found it possible to make use of secondhand containers at substantial savings. The average secondhand corrugated carton was good for about seven trips to market and cost about 7 cents per trip. A number of growers used bushel boxes, baskets, or field crates as master containers. These were good for about 28 trips to market and cost about 4 cents per trip.

Labor Costs

It is difficult to summarize labor costs in putting up consumer-size units because of wide differences in practices. If orders are available and apples can be packed without storing, costs may be relatively low. If, as is true of much of the crop, the apples are graded into regular wholesale units, put into storage, and regraded or sorted when later put into film bags, costs are higher, since a double handling is usually involved.

On the average, east of the Rockies it cost 10 to 12 cents extra for labor to pack a bushel of apples in consumer-size units in contrast with the regular wholesale bushel basket, box, or crate. On the West Coast, where most apples are placed in storage and consumer units are packed only as orders are received, it cost about twice as much for labor on consumer units as for the usual wholesale box—a fact not always appreciated by apple buyers.

Hand Vs. Machine Packaging

Of 181 growers and shippers, almost two-thirds reported that no mechanical apparatus was used in packaging over 1 1/4 million bushels of apples in small-size consumer units. On the other hand, 66 growers and shippers (36%) used some kind of mechanical equipment in packaging about 1 3/4 million bushels of apples in consumer-size units.

It might be expected that all grower-shippers who packed a large volume of consumer-size units would use automatic packaging equipment, but this was far from true. In fact there were nine grower-shippers (handling an average of 13,821 bushels) who packed by hand and another nine (handling an average of 13,114 bushels) who used automatic machinery. Similarly seven growers (who packed from 40,000 to 100,000 bushels a year) packed entirely by hand, while

eight (who packed from 40,000 to 100,000 bushels) used automatic equipment.

One of the largest packers, handling 200,000 bushels a year, insisted that he could not get a high-quality pack if he used automatic baggers. On the other hand, four grower-shippers (averaging 180,000 bushels a year) used all the equipment they could get.

As time goes on, there is a strong likelihood that more and more automatic bagging equipment will be used.

A comment frequently made by grower-shippers was that more complete use could be made of equipment if the large buyers, especially the large chain systems, would place orders well in advance of needs. Few grower-shippers take a chance on bagging apples unless they have a firm order from the buyer.

Voluminous correspondence with grower-shippers throughout the United States indicates a crying need for some kind of rough yardstick of total costs of packaging against which they can measure their individual efficiency. The following averages may be helpful:

On about 2.7 million 3-pound poly bags, the average cost per 36-pound

HANDLING APPLES?—EASY, THERE!

A packing house survey in Massachusetts last year showed that mechanical injury was the cause for 61% of the total of apples' grading out less than U. S. Fancy. Mechanical damage was five times greater than damage caused by all pests.

carton for bags, master carton, and labor for grading and packing was 83 cents if new cartons were used and 55 cents if secondhand cartons were used. This is 6.9 cents per bag and 4.6 cents per bag, respectively.

On about 1.8 million 4-pound poly bags, east of the Rockies, the average cost per 40-pound carton was about 78 cents in new cartons and about 60 cents if secondhand cartons were used. This was equivalent to 7.8 cents per bag and 6 cents per bag, respectively. On the Pacific Coast, however, costs on 5.6 million 4-pound poly bags averaged \$1.04 per 40-pound (new) master container or 10.4 cents per bag.

On slightly less than a million 5-pound poly bags in new 40-pound cartons, costs averaged about 69 cents per carton or about 8 1/2 cents per bag. In secondhand cartons costs averaged about 6.3 cents per bag.

In the Shenandoah-Cumberland area over 3 million 5-pound bags in new 45-pound cartons averaged 88 cents per carton or 9.8 cents per bag. In the same area, on about 2.4 million 5-pound mesh bags in new 45-pound cartons, average cost per carton was \$1.00 or 11.1 cents per bag.

THE END.

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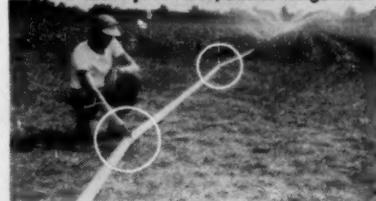
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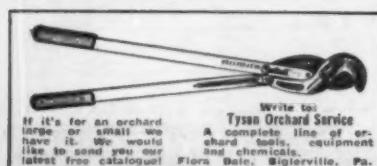
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MARKETING Texas Peaches

Growers find co-operation in marketing brings better prices

By A. B. KENNERLY

ALTHOUGH the peach growing area around Fredericksburg, northwest of San Antonio, Texas, is noted for quality peaches, it has suffered from erratic markets. Early peaches were marketed at good prices, but profits were still hanging on the trees when markets began to sag.

Studying this problem, the Gillespie County Peach Growers Association



Henry J. Burg, office manager for Gillespie County (Texas) Peach Growers Association, pulls out one of the boxes used for shipment of their peaches. Best peaches are packed in cell cartons made by Gaylord Container Corp., St. Louis, Mo. The 2 1/4 to 2 1/2-inch peaches are packed in one-bushel universal wirebound crates made by Continental Box Co., Inc., Houston.

at Stonewall sought to increase profits for its 28 members.

An important contribution to orderly marketing of peaches by the association is the plan of obtaining daily advance estimates of the quantity of peaches coming into the shed.

A small penalty of 10 cents a bushel added to the regular association charge of 60 cents a bushel for handling has encouraged growers to report estimates to the association office several days in advance.

Packers Pick

"The co-operative offers the best means of showing growers how to grow and market a peach crop," says C. A. Stone, county agent and association advisor. "For example, persons with experience on the grading table when used as pickers do a much better job. They leave the under-ripe peaches and culls, picking only those at the best stage of ripening. Fewer peaches are left on the tree too long. What would grade as a creamery peach at \$4 a bushel today may have been a firm ripe at \$12 yesterday. On the other hand, an \$8 a bushel peach left

on the tree a day longer might become a \$12 a bushel peach."

Simon J. Burg, association manager, had successfully experimented with making peach puree for ice cream mix, so processing equipment was purchased in 1955. Full-scale operations in 1956 on the tree-ripened creamers sorted out on the grading line showed the value of processing peaches that are too ripe to ship. Selling their peach puree to a San Antonio ice cream plant, grower-members realized \$3 a bushel for the over-ripened compared with 75 cents in other parts of the state.

Shipment of a small box of four high-quality peaches last year to key persons, including newspaper and farm radio editors and buyers, over the Southwest—a tasty announcement of the arrival of the peach season—is another example of the association's efforts in promoting the fruit produced by its members. THE END.

PEACH PACKAGES

(Continued from page 10)

the peaches firmly in place. No over-wrap is needed on this package.

The time necessary to remove field heat from peaches packed in the Bailey Pack compares very favorably with other trays studied. Additional cost of prepackaging the Bailey Pack was slightly less than 2 cents per pound over the cost of packing peaches in the Louisiana cell box.

The 4-fruit Tripl-tite Tray is a flat-bottom tube type tray that can be used with no overwrap or as a wrapped package. The wrapper tube supplied with this container was not too desirable because no provision was made for ventilation. Visibility of all fruits in the package was not good. No provision was made in the construction of this package to prevent fruits from rolling or falling from the packed tray when it is used as an open container.

Fruit cooling of packed fruits in the open Tripl-tite tray was comparable to other open-type packs, but the time necessary to cool fruits in the wrapped package was excessive. Prepackaging cost for this container was greater than the cost of packing the Bailey Pack.

The 4-fruit cellophane tube is a flat-bottom container that performs similarly to other open-tube trays. Fruits will fall from this package when tilted, but the tendency for fruits to roll from the package is not as great as in the Tripl-tite tray. Prepackaging cost for this tray was greater for the cellophane tube than for other 4-fruit cartons. THE END.

WINDFALLS

It is said that Isaac Newton while sitting under an apple tree was struck on the head by a falling apple. Thus he conceived the great truth of his Law of Gravitation.



By HENRY BAILEY STEVENS

What a Country! IT is less than a year since I visited Jack Hamilton at Wenatchee. Yet, within that time, the vastness and diversity of the changes that have occurred in that section are, as he writes me, amazing:

"Ten miles upstream on the Columbia River a new hydro-electric dam is well underway. This is one of a series of about 10 dams in 500 miles of the river between its mouth and entrance from Canada.

"Another similar dam is under survey 50 miles upstream, and two more, 50 and 100 miles downstream. Saddest part, to us, is the destruction of 2000 acres of America's finest orchard-land by this nearest dam. Growers will be well paid (average \$3500 per acre) for their flooded lands, but an irremedial loss of fruit production and revenue is inevitable. Apples are the principal loser, with hundreds of acres of peaches, pears, apricots, and cherries also going.

"In the Columbia Basin desert-reclamation country irrigated by Grand Coulee Dam, the Royal Slope area was opened up for settlement and production this year. Ten by 50 miles, this gentle south slope, which was only barren sagebrush six weeks ago, is dotted with green-growing crops. Soil is immensely rich, and water supply is almost unlimited. Climate and elevation promise a rich fruit-tree output. Principal disadvantage—20 to 50 miles from a railroad, but motor-truck market-hauls will obviate this. Our company will be shipping Russet potatoes and dry beans in extensive volume from here in August and September.

"Early in May we got a rare 'treat' in a smashing hailstorm, which practically removed our 2000 rosebushes and other landscaping from this year's business. Fortunately, it was a

localized 2 x 4-mile affair, which left windrows and drifts of 1-inch hailstones in all leeward areas.

Snowball "WE must have a Texas-Bloom like affection for extremes. Year ago Wenatchee district's apple crop of 11,000 carloads was the lightest in 20 years. We are just finishing blossom-time with a mammoth snowball bloom on all tree fruits. Apple acreage was cut way back by recent winter freezes, but we've 18,000-20,000 carloads in prospect this year, given normal weather.

We're appalled at our inconsistencies: rented 100 hives of bees to pollinate our 400 apple acres . . . then worked 'round-the-clock for a week with two speed-sprayers, thinning off all the side bloom we could reach, leaving (theoretically) only the king-blossom in each cluster . . . and are now faced with the prospect of 50 to 100 humans on the payroll during June, hand-thinning whatever the chemicals left on in excess of crop requirements. Everything clicked right for maximum fruit-set: no spring frosts, excellent bloom, including the pollinating varieties as Jonathans, Romes, and Goldens, and trees in strong vitality. Our best acres should yield 1000-2000 bushels per acre this fall. We planted about 50 acres of virgin sagebrush land overlooking Lake Chelan with our Chelan Red trees a month ago. They're apparently 99% alive and greening.

"We're also a widely varying people for entertainment. Past two weeks have witnessed Wenatchee's blossom festival and Chelan's regatta. It all shows that 'Fruit growing is such fun'!"

Address your "Windfalls" contributions to Henry Bailey Stevens, AMERICAN FRUIT GROWER, Willoughby, Ohio.

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Quick overlap resealing permits easy inspection of fruit. Pack above has been opened, resealed.

CHERRY LUG LINERS

Poly-lined sweet cherries win wide acclaim of shippers, trade

THERE'S a polyethylene liner in almost every lug of western sweet cherries arriving on eastern markets this year—and there's a good reason for it!

In 1955, when the lug liners were first used commercially, about 16 car-loads of cherries moved to market in the film-lined lugs. Last year 80% of the Northwest crop was packed in the new liners.

Developed by USDA, the polyethylene lug liners have definite advantages. There is a marked reduction in decay during transit and storage. Stems remain fresh and color bright for a longer time, even under normal marketing conditions. In short, the quality and appearance of the cherries at the point-of-sale are vastly improved—a highly important factor in marketing perishable fruit.

Lower Transportation Cost

In addition, the film liners are great cost-savers to shippers. Fruit can be shipped by freight instead of by express, and the use of dry ice as a source of carbon dioxide can be eliminated. As much as two weeks can be safely allowed for shipment.

Earlier tests had shown that many synthetic films were not suitable for use as sealed bag liners; polyethylene film of 1.5 mil thickness seems to be the answer. Under refrigeration, cherries in poly-lined lugs are able to maintain the desirable levels of carbon dioxide and oxygen for preserving good color and condition of the fruit.

Because the initial packing temperature of the cherries does not materially affect the gas levels in the sealed liners, noncooled cherries can be packed directly into the poly packs, provided that subsequent precooling is rapid and thorough.

As a final word of caution, the polyethylene liners must be perforated or opened as soon as the cherries are removed from cold storage or refrigerated cars and held at higher temperatures. This prevents the build-up of undesirable levels of carbon dioxide in the packs. THE END.

POLY PACK STANDARD FOR WINTER PEARS

THE poly pack for pears is now considered almost standard procedure, reports Fisk Gerhardt, senior USDA physiologist at Wenatchee, Wash. Last season approximately 3½ million boxes of winter pears (out of a total of about 5 million) were packed in polyethylene film liners.

Many packers have been perforating their liners with one or two small holes after packing to reduce the carbon dioxide concentration around the fruit and thereby prevent CO₂ injury in pears susceptible to brown core.

Most shippers slit the poly liners at the time of shipment in order to preclude ripening difficulties at destination because of the development of adverse atmospheres at room temperature.

The poly liners have prolonged the shelf life of pears and improved the condition and appearance of the fruit. The consensus of receivers and retailers, says Gerhardt, is that the poly liners will insure all factors staying in the pear deal as long as supplies are available.



DISPLAY CARTON FOR LIMES

Calavo Growers of California, Los Angeles, are packaging fresh limes of their grower-members in this display carton, to induce grocers, soda fountains, and other retail outlets to stock more of this citrus fruit. The one-piece, three-color display box boasts a die-cut tuck-back display cover. The package was cited in this year's carton contest held by Folding Paper Box Association. It is manufactured by Andrew Paper Box Co., San Leandro, Calif., and Standard Paper Box Corp., Los Angeles, for the Calavo Growers.

AMERICAN FRUIT GROWER

CARTONS for Plums

USDA compares market response of fiberboard cartons with crates

USE of newly-developed fiberboard containers for marketing western plums has doubled in the past year.

Although the majority of buyers still favor conventional crates, the volume of cartons shipped in 1955 jumped from 30,000 to 60,000 last year, with a further increase expected this year.

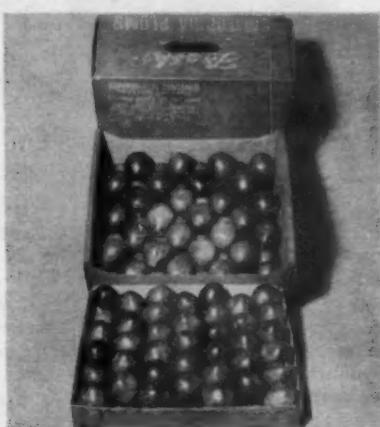


Photo by USDA
This carton was one of the most successful containers in USDA tests. Removal of face packed tray shows the orderly place pack fill.

Not only do the new cartons cost less and are cheaper to pack and load (19 to 30 cents per equivalent crate), but they also are easier to handle and have a lighter tare weight than the 4-basket crate.

Appraisal of the relative salability and trade acceptance of the new containers was conducted last year by USDA Agricultural Marketing Service economists, who made 30 direct comparisons of New York prices.

Although final conclusions cannot be drawn, use of the cartons is expected to increase as satisfactory trade acceptance is assured and as the boxes are made available on the market daily.

THE END.

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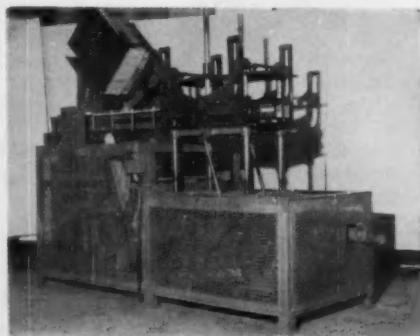
**NEW FOR
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In the Bag



Just the other day I saw a new automatic apple bagger which seemed to operate by magic. The machine weighed and packed 450 bags an hour and, what was more important, I was able to operate it after only a few minutes of instruction. Designed to save space, the machine requires only 3 x 2 feet of floor space and will fit any return-flow table. Bridging and jamming are prevented by a series of V-belts that form two V-shaped "singulator" troughs. The new bagger is made by John Bean and you can get all of the facts by writing Art Gerard, John Bean Division, Food Machinery and Chemical Corp., Lansing 4, Mich.

60 Fanci-Paks a Minute

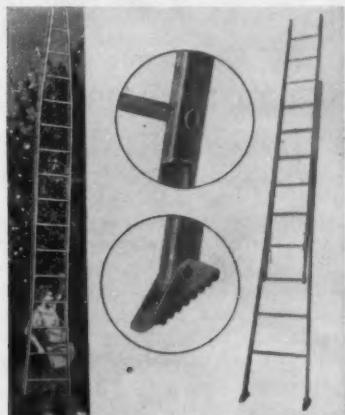


Housewife demand for tree-ripened peaches is growing rapidly. The peach grower who can get his crop to market in top condition will make bigger profits than ever before. The easiest way to do the job is by using the tested Fanci-Pak package. To make the packing job easier, the manufacturers of Fanci-Pak have

- Apple Bagger
- Carton-Forming Machine

developed a grower-tested machine which forms cartons ready to be filled with peaches at a rate of one a second. Designed by a Moses Richter, who has been instrumental in the development of new peach-handling equipment, the machine is ideal for all large peach growers. You'll want the latest information on the new equipment, and I urge you to write Robert Allison, Alford Cartons, Ridgefield Park, N. J.

'Easy Pickin's'



Down in southern Illinois I talked with a grower who has increased the productivity of his pickers and the quality of his fruit. It's all been done with aluminum ladders which are easy to move—strong and indestructible. Aluminum ladders cost only slightly more than wooden ones and last a lifetime. The southern Illinois growers are using ladders made by the N. B. Spurgeon Co., 29 North Wacker Drive, Chicago 6, Ill. Why not write them for prices and details.

Diazinon

A new insecticide is now available to growers everywhere. The new chemical has been orchard-tested for several years and has given top control on many fruit pests. Codling moth, apple maggot, aphids, pear psylla, cherry fruit fly, and the suppression of mites are effected. The new organic insecticide has been tested in commercial orchards since 1953 and promises to give growers control with one chemical, where formerly two or three were required. Diazinon is a comparatively safe chemical to use and residue tolerances are exceptional. You should have the latest information on this new chemical; merely write Nick De Manczuk, Geigy Chemical Corp., P. O. Box 430, Yonkers, N. Y.

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Successful fruit growers in all lines are improving their annual profit by improving sales appeal, brand identification, and marketing convenience through the use of our corrugated packaging specialties. The PLANNED PACKAGING line includes bag masters, cell packs, and tray packs; also 8, 12 and 16 qt. master containers for berry boxes. Two-color printing standard; special design if you wish. Write PRODUCE SALES, The Ohio Boxboard Co., Rittman, Ohio.

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The Sprinkler
of Achievement

No. 30

With its spoon-type, one-piece arm, open spring and simple, efficient bearing, Rain Bird has achieved world-wide sprinkler irrigation success.

For top sprinkler performance, always count on Rain Bird, the sprinkler that has set the standard for sprinkler performance. Also, be sure the sprinkler system you get meets the American Society of Agricultural Engineers' standards and fits your requirements exactly.

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609 WEST LAKE ST., PEORIA, ILLINOIS



The AP-PEACH PICKING BAG

Saves Time—Reduces Bruising
Heavy canvas over rigid frame protects fruit. Berries fall quickly through bottom. Especially for peaches and easily bruised apples. Write for folder.

JOHN C. BACON CORP., GASPORT, N.Y.

Are You a Nursery Salesman?
Add to your income by selling AMERICAN FRUIT GROWER. Write today for our liberal nursery agents' plan. Address:

EDWARD MEISTER, Circulation Manager
AMERICAN FRUIT GROWER
Willoughby, Ohio

ZON SCARECROW

Positive protection. Uses carbide or acetylene. No pilot. Retails \$59.50. (Dealerships available)

B. M. LAWRENCE & CO.
244 California St., San Francisco



EASY PICKING

Midwestern growers are using a new aluminum picking ladder which weighs so little your wife can do most of your harvesting. The new ladder is strong and the joints are of a special design eliminating bolts or welds. The picking ladder is available with safety shoes. The cost is surprisingly low. The aluminum ladder will of course last longer and not warp. Why not get full details today—write

THE SPURGEON COMPANY
29 North Wacker Drive
Chicago 6, Illinois



The new lug was designed by David Scott, strawberry grower of Northport, Mich., and developed by Michigan Experiment Station's H. P. Gaston and USDA's J. H. Levin. It features a detachable handle, provides adequate ventilation.

NEW LUG for Strawberries

Ventilated picking lug means lower costs and less bruising

THE new ventilated picking lug is expected to boost efficiency and reduce costs in harvesting strawberries for processing.

Fitted with a detachable, heavy wire handle, the improved tray makes it possible to pick berries in the field and transport them to the processing plant in the same container.

Each V-lug holds about 9 quarts. The conventional carrier holds 8 hallocks (1-quart boxes) and must be emptied into cherry lugs which are then stock-piled for shipment to processing plants.

In commercial field trials conducted last year by Michigan State University in co-operation with the USDA, 92% of the pickers preferred the V-lugs.

Ends and center partitions of the new container being higher than the sides, adequate ventilation for stacking without danger of crushing the fruit is provided. The openings between the stacked lugs also facilitate handling. Thus, because of less bruising and better air circulation, quality of the berries is higher than fruit handled by the conventional method.

Detailed information on the V-lug is given in a reprint, "Ventilated Picking Lugs for Strawberries," Article 39-54, May, 1957. Write for a copy to Agricultural Experiment Station, Michigan State University, East Lansing, Mich.

Growers who harvest at the rate of 150 or more carriers per hour eliminated two workers at the check-in station when they converted to the V-lug. One checker can handle 150 of the new lugs per hour, compared with 50 by the conventional system.

Another advantage of the V-lugs is that they can be stacked on a pallet in the field and the pallet loaded or unloaded as a unit. One man and a fork lift can load and unload pallet-

ized lugs 10 times as fast as handling conventional lugs by hand. Trucking costs to the processing plant are also reduced because more berries can be carried per load. One grower using the new lug increased the carrying capacity of his trucks by 1600 pounds, thus eliminating one round trip and saving about \$7 per day. The standard pallet used in trucking the fruit holds 50 of the conventional lugs, against 96 to 104 of the V-lugs.

Initial cost of V-lugs total \$853 per 100 pickers. Equipment for the conventional system amounts to \$995. Savings on depreciation of V-lugs are about \$40 a year.

V-lugs holding 6 or 8 one-quart hallocks can be built for growers who ship berries to fresh fruit markets. The new lugs also may prove useful for raspberries. THE END.

BAN 2,4-D IN GRAPE AREA

THE California State Department of Agriculture has placed a ban on the use of 2,4-D and other injurious herbicides within 2 miles of any cultivated commercial vineyard in the Lodi area. The ban is effective between March 15 and October 15 of any year. The use of ester formulations of injurious herbicides in the area are also prohibited during the same period.

The amended regulations governing the use of 2,4-D were put into effect in response to a petition by grape growers that their vines were damaged last year by drift of the weed-killing chemical used in grain fields in the area.

Associate Editor Given HONORARY DEGREE

AT the anniversary celebration of Hannover Institute of Technology, Hannover, Germany, on July 12 the honorary degree of Doctor of Scientific Horticulture was conferred upon Dr. H. B. Tukey, head of the department of horticulture at Michigan State University and associate editor of AMERICAN FRUIT GROWER.

At the symposium held in connection with the celebration, Dr. Tukey presented a paper on foliar feeding and leaching as determined by radioactive isotopes. While in Europe, he revisited research stations, universities, and fruit grower friends in Germany and England.



New Miticides Look Promising

Entomologists hear about new chemicals for controlling mites

By LOREN H. MILLIMAN

EFFECTIVENESS of some of the newer insecticides and miticides was discussed by 300 entomologists at the 41st annual meeting of the Pacific Branch of the Entomological Society of America in Portland, Ore.

Because mites are developing resistance to various miticides, it is a race between the chemists and the pests. One disturbing feature of the battle is that mites are developing not only a tolerance to one chemical, but also a cross-tolerance which includes several. Some studies indicate that once a tolerance is acquired, it is not lost by succeeding generations.

Mitox has given almost season-long control of European red and clover mites on apples and pears when the miticide was applied in the prebloom stage, according to Carl R. Tanner of Portland. Supplemental summer sprays were necessary against the two-spotted mite.

Aphids and two-spotted spider mites were controlled effectively by applying Thimet in the soil alongside strawberry plants. A. F. Howland and J. Wilcox, USDA entomologists stationed at Whittier, Calif., discovered. Soil application was as effective as spraying the material on the leaves.

AC-528, aramite, Chlorobenzilate, demeton, Kelthane, Sulphenone, Triethion, and wettable sulfur all gave good control of the plum nursery mite on sweet cherries, Edward W. Anthon, of the Washington State College Tree Fruit Experiment Station, Wenatchee, reported.

New Insecticides

A new experimental insecticide, originally known as 7744, now known as Sevin, in field tests shows promise against citrus red scale, codling moth, and grape leafhopper. Sevin is unusual because it contains no sulfur, phosphate, or chlorinated groupings in its composition, according to Robert E. McKenzie of the Carbide & Carbon Chemicals Company, San Francisco. Several insecticides are effective in controlling the western tussock moth on citrus in southern California, E. Laurence Atkins, Jr., from the University of California Riverside experiment station, reported. Among these are Dilan, Sevin, Guthion, Phosdrin, methyl parathion and parathion, as well as DDT and DDD.

THE END.

Build Greater Profits . . .

By Building Up Your Orchard Library Now!

• PROFITABLE ROADSIDE MARKETING.

By R. B. Donaldson and W. F. Johnstone. 142 pages—\$2.00

This practical handbook covers building stands, handling and storing produce, packaging, pricing, advertising, etc., and is illustrated with many plans, photographs, charts, and drawings.

• INTO THE FREEZER AND OUT.

By Tressler, Evers and Evers. 246 pages—\$3.75

How to freeze foods in the home kitchen—from selecting the freezer through “putting up,” packaging, storing, and serving. Step-by-step illustrated directions.

• SHOPWORK ON THE FARM.

By Mack M. Jones. 626 pages—\$6.50

Tells how to use power and hand tools, including welding equipment; make electrical repairs; work with metal, rope, leather, cement, and paint.

• FRUIT NUTRITION.

By Norman F. Childers. 910 pages—\$10.00

Tells all about fruit tree fertilizer deficiencies and minor element nutrition. Chapters on all the important fruits.

• DWARF FRUIT TREES.

By Lawrence Southwick. 126 pages—\$2.50

Complete information on the selection, planting, and cultivation of dwarf fruit trees.

• SMALL-FRUIT CULTURE.

By James S. Shoemaker. 450 pages—\$6.50

Discussions of improved cultural practices; the newer varieties; up-to-date control measures for insects and diseases; irrigation and freezing.

• THE PRUNING MANUAL.

By E. P. Christopher. 320 pages—\$5.00

The latest on pruning. Over 200 pruning diagrams. Tree fruits . . . Grapes . . . Brambles . . . Shade Trees and Ornamentals.

• APPLES AND APPLE PRODUCTS.

By R. M. Smock and A. M. Neubert. 486 pages—\$9.75

The composition, nutritional qualities, factors affecting quality, storage methods, and preservation of apples. Latest information on all apple products.

• DISEASES OF FRUIT CROPS.

By Harry Warren Anderson. 501 pages—\$8.50

This brand-new book discusses the diseases of cultivated fruit crops grown in the temperate zone, both in America and abroad, with the exception of citrus and subtropical fruits. Up-to-date control information previously available only in scattered research bulletins.

• FRUIT SCIENCE.

By Norman F. Childers. 630 pages—\$6.50

A fruit grower's bible by a leader in the industry. Fruit growing from A to Z.

• PROPAGATION OF PLANTS.

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A practical guide on the working methods of plant propagation. For the commercial plant propagator as well as the beginner.

• GRAPES AND WINES FROM HOME VINEYARDS.

By U. P. Hedrick. 326 pages—\$6.00

Complete information about American grapes and wine making, including equipment needed.

• THE HOW-TO BOOK ON STRAWBERRIES.

By Robin Wyld. 112 pages—\$1.50

Written for the layman and illustrated with cartoons showing how to plant, tend, and harvest strawberries.

• DESTRUCTIVE AND USEFUL INSECTS.

By Metcalf, Flint and Metcalf. 1071 pages—\$12.50

A completely revised and up-to-date edition of this famous book. Valuable descriptions and photographs of all fruit insects.

• PRACTICAL HORTICULTURE.

By James S. Shoemaker and B. J. E. Teskey. 374 pages—\$4.20

For the gardener or student who wants a practical and easy-to-follow guide to the how, what, and why of horticultural operations. Each crop or group of associated crops—tree and small fruits; vegetables; flowers, and ornamentals—is dealt with individually.

• GROWING FRUIT AND VEGETABLE CROPS.

By T. J. Talbert. 350 pages—\$4.50

Easy-to-follow fundamentals which make fruit and vegetable growing a success are set forth in this book. Supplemental irrigation is given special consideration.

• THE HIVE AND THE HONEYBEE.

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The why and wherefore of beekeepers—with special emphasis on the role of the honeybee in pollination.

• GROWING NUTS IN THE NORTH.

By Carl Wescske. 124 pages—\$2.00

Here is the result of the author's 33 years of experience at his Hazel Hills Experiment Farm in Wisconsin. He describes methods of hybridization, grafting, planting, and pollination.

• CHERRIES AND CHERRY PRODUCTS.

By Roy T. Marshall. 290 pages—\$8.50

A valuable aid to cherry growers and processors. Complete information on growing, handling, and processing sweet and sour cherries by an author who has worked for many years with Michigan cherry growers.

All books sent postpaid on receipt of check or money order.

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BOOKS

THE HOW-TO BOOK ON STRAWBERRIES. The layman's primer, the professional's reference and everyone's factual guide to more and better strawberries. \$1.50. AMERICAN FRUIT GROWER, Box 159, Willoughby, Ohio.

TOMATO GROWERS—JUST PUBLISHED 1957 American Tomato Yearbook. Crammed with important facts. Send \$2.00. Complete volume 1951-1957, \$8.00. AMERICAN TOMATO YEARBOOK, Box 142-F, Westfield, New Jersey.

BERRY BOOK: "THIRTY YEARS OF BERRIES." Raspberries and Strawberries. 84 pages, price \$1.00. P'paid. ROY TURNER, 1525 S. Livingston St., Peoria, Ill.

FOR EDUCATION, PLEASURE AND profit, read "ADVENTURES IN BEEKEEPING." A true story. \$2.00. ROBERT OGLESBY, R.R. 1, Middletown, Ohio.

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\$100.00 WEEKLY RAISING EARTHWORMS! Free plan reveals how! OAKHAVEN-25, Cedar Hill, Texas.

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MODERN AUTOMATIC ELECTRIC CIDER presses for roadside stands and small orchardmen. Presses 10 gallon to 15,000 gallon capacity. Everything for the cider maker, ball bearing grates, press racks, cloths, packing, valves, labels, filters, pasteurizers, bottling equipment. Write for supply catalogue. W. G. RUNKLES' MACHINERY CO., 185 Oakland St., Trenton 8, N.J.

UP-TO-DATE SWISS HYDRAULIC CIDER and wine presses. You'll get more juice per fruit-pound. Write to: RUDOLF ZORN, 542 S. Broadway, Los Angeles 13, Calif.

NEW AND USED CIDER PRESSES. Complete repair facilities for all types of presses. At once delivery on press cloths, press racks, hydraulic valves and other supplies. Write for catalog. THOMAS-ALBRIGHT COMPANY, Goshen, Indiana. Phone 3-1785.

PALMER CIDER PRESSES, PARTS FOR all makes, rebuilt presses of all sizes, cider supplies, containers, cloths and related equipment. ORCHARD EQUIPMENT AND SUPPLY COMPANY, Hill Street, Bristol, Connecticut.

CIDER MILLS—HYDRAULIC, 600 TO 15,000 gallons per day capacity. Hammermills and Grindmills, Pomace Cones and Chutes, Cider Pumps, Filters, Pasteurizers, Fillers, Tanks. Complete equipment for roadside stands to commercial plants. Instructions for installations and successful operation. OTTO W. CUYLER CORPORATION, Food Processing Machinery—since 1912. Webster, N.Y.

MT. GILEAD - 15 INCH HYDRAULIC ELECTRIC motor. Good condition. STACY ORCHARDS, Lyons, Indiana.

FOR SALE—EQUIPMENT & SUPPLIES

BUY SURPLUS DIRECT FROM GOVERNMENT at tremendous savings, farm tools, machinery, truck, jeep, tractor, power units, hundreds others listed in our bulletin. Price \$1.00. GOVERNMENT SURPLUS SALES, Box 169ARG, East Hartford 8, Conn.

SENSATIONAL GARDEN TRACTOR. HOES between plants and rows, including strawberries. Eliminates hand hoeing. Nothing else like this. Patent 2742840. Also tills. Fantastic offer to first few inquiries. AUTO HOE, DePere 8, Wis. COMPOSTING CULTURE MAKES 4 TONS. \$2.30. RAMMOSER—Manahawkin—421—New Jersey.

BERRY CARRYALL. HOLDS SIX QUART baskets. 101 uses. \$3.00 ppd factory. WALDEAN CO., Box 112A, Meriden, Conn.

BATES FRUIT CLEANER AND POLISHING machine endless horse hair brush belts, 12" x 4 1/2". Other size flexible brush belts made to specification. MAGUIRE BROS. BRUSH CO., Inc., Bloomfield, New Jersey.

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GIBBERELLINE ACID \$8; \$18. DDT 50W OR Dust, cwt \$27; 200 pounds \$53. DDT 75W or Dust, cwt \$40; 200 pounds \$74. DDT 25E, 30 gallons \$54. 55 gallons \$90. ELM SPRAY, 55 gallons \$99. FLY BOMBS, dozen \$10; gross \$84. Check with order, prepaid Rockies. WAGNER CO., Box 11, Ypsilanti, Michigan.

SIXTY THOUSAND NEW AND USED apple crates, cleaner, grader, ladders, picking bags, basket turner, Model 48 Bean sprayer, 150 gallon Bean sprayer, Rollomulcher, 35 and 55 Royal Bean pumps. Bargains. CORY ORCHARDS, Cory, Indiana.

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TRESEAL, A PERFECT WOUND DRESSING, ready for delivery. Treseal has fungicidal properties. Has been used for many years by commercial men on shade and orchard trees. Send \$1.00, which includes postage and tax, for can complete with brush attached. A full year's supply for average home owner. MID-WEST TREE EXPERTS, 8227 Wornall Road, Kansas City 14, Missouri.

APPROXIMATELY 8,000 FIELD CRATES, mostly Owasso type folding crate—Perfect condition. LONE PINE ORCHARDS, Libertyville, Illinois.

HONEY

PRIMITIVE OZARK HONEY. PROPERLY handled from modern hives. Well ripened. Five pound pail \$2.20, plus postage on six pounds insures delivery. LEE C. WARTH, Van Buren, Mo.

MISCELLANEOUS

BLUEBERRY BOXES, CARDBOARD, INSIDE and Rim White. 1,000 quarts \$15.50, 1,000 pints \$13.00. Freight collect. RONALD PENNINGTON, Rockford, Michigan.

500 GUMMED NAME-ADDRESS LABELS printed, 65¢, ARTPRINT, Box 166, Sheboygan 11, Wisconsin.

BANANA PLANT, GROWS ANYWHERE—indoors, outdoors. \$1.50. Postpaid. P. SULEN, Lady Lake, Fla.

PROTECT YOUR BERRY CROPS. CHEESE-cloth 100 yards by 52" in convenient 10 yard lengths. \$7.00 prepaid. 50% less mill price. MID-CITY, 138 East 34th Street, New York.

OF INTEREST TO WOMEN

EARN \$50.00 FAST SEWING OUR PRECUT products. Information 3c. THOMPSON'S, Loganville 41, Wisconsin.

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SEW APRONS IN YOUR HOME, PROFITABLY. Write ADCO, Bastrop, Louisiana.

DRYCLEANS CLOTHING FOR ONLY 10¢ per garment. Lightning seller. Saves drycleaning bills. Samples sent on trial. KRISTEE 110, Akron, Ohio.

STAMPED LINENS FOR EMBROIDERY or painting. Buy direct from manufacturer and save. Send for FREE catalog. MERRIBEE 16 West 19th St., Dept. 408, New York 11, N.Y.

ORCHARD FOR SALE

FOUR YEAR OLD 3,000 PEACH TREES, 27 acres, 20 acres timber close to metropolis. Modern home. AMERICAN FRUIT GROWER, Box 170, Willoughby, Ohio.

40 ACRES ON PAVED HIGHWAY. MODERN house, big packing shed, retail sales shed, good location 25 miles east Kansas City, wholesale market. Fine, full crop apples. EDGAR GRAHAM, Grain Valley, Mo.

10 ACRES, SIX ACRES APPLES. MODERN house, new bottle gas furnace. Workshop finished in knotty pine. New buildings. Buffalo turbine and all equipment, \$17,500. On Route 97. GERALD EVANS, Cuba, Illinois.

221 ACRES IN ALL. 75 ACRES APPLES and peaches. 4 bedroom home. Hot water heat. 1 full bath, 2 part baths. Equipment and cattle go. On State Highway. R. E. SWARTZ, CENTRAL REALTY CO., Logan, Ohio. Box 545.

EXCEPTIONALLY FINE 25-ACRE APPLE orchard with 700 trees on Route 20. Twelve different varieties. Also 12 acres heavy wheat and 12 acres corn. Five-room house with accessory buildings. \$21,000 with mineral rights or \$20,000 without. Some machinery included if sold soon. J. M. MULVANY, Tecumseh, Michigan.

35 ACRE APPLE ORCHARD, FULLY equipped. Over 700 bearing trees. Good crop included. Modern 9 room house. Beautiful view. State road 30. Churches and schools near. EU-CHEPHUS BECKER, Schoharie, New York. R.D. 2.

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INVENTORS! WHEN YOU ARE SATISFIED that you have invented something of value, write me, without obligation, for information as to what steps you should take to secure a patent. Write PATRICK D. BEAVERS, registered patent atty., 813 Columbian Bldg., Washington 1, D. C.

RABBITS

RAISE ANGORA, NEW ZEALAND RABBITS on \$500 month plan. Plenty markets. Free details. WHITE'S RABBITRY, Delaware, Ohio.

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AMERICAN FRUIT GROWER

Good SIGNS SELL FRUIT!

Is your roadside sign an eyesore or a selling aid?



Freshly-painted white sign in front of the Apple-mart complements colonial architecture of surrounding buildings. Small sign hooks onto main sign, is changed when mart is closed. Signs were made by Macey Sign Co., Worcester, Mass.

AT Applecrest Farms, Hampton Falls, N.H., attractive, freshly-painted signs are an inviting lure to customers. On rush days grower William L. Wagner needs nine sales-clerks to wait on trade and a special policeman to direct parking.—*Charles L. Stratton.*



Another advertising sign visible from the highway is crest insignia on side of packinghouse. This crest is used in all orchard's advertising.

YOUR ROADSIDE MARKET

(Continued from page 11)

only 5% had prices that exceeded local retail prices.

Average weekly sales were lowest for markets not using any advertising method and for those where signs were displayed only at the market. When highway signs were placed along the highway approaching the market, sales increased. When signs were displayed at the market and along the highway, a further sales increase was noted. When newspapers, radio, or container labels were used, in addition to signs at the market and along the highway, sales increased to even a higher level.

Cost of Replacement

In the study on appearance of roadside stands, markets were arranged by cost of replacement and average weekly gross sales. Replacement cost was thus used as a relative measure of market appearance. In other words, if the appearance of the markets was related to replacement value, the weekly sales volume per market was also related. This relationship was apparent from data obtained during the study. Markets having a replacement value of less than \$50 had sales of only \$61 weekly. Markets valued between \$100 and \$199 had sales of \$83 per week. Markets valued at \$1000 and over had sales in excess of \$600 a week.

AUGUST, 1957

Appearance of the market structure was considered by operators as an important factor in achieving good sales levels, especially in attracting tourist customers. Only quality, price, and service were thought to be of more importance in attracting local trade.

Complete expense data was collected for permanent type markets. Total operating costs, exclusive of unpaid family labor, amounted to only 20.7% of gross sales. In order of magnitude, this included: 1) products purchased for resale; 2) containers; 3) paid labor; 4) depreciation of buildings and equipment; 5) light, power, and heat; 6) advertising; and 7) miscellaneous. The remaining 79.3 cents per sales dollar was available as compensation for the farmers' own products and for unpaid family labor.

The farmer's share of the consumer's total food dollar in the United States is reported to be about 40 cents. While the comparison is not entirely relevant, it is interesting to note that this is nearly one-half that indicated for the products marketed through roadside markets in the South Carolina study. Another significant factor is that much of the labor used in operating these markets was family labor which would probably not have earned any returns elsewhere. The returns for labor represents a substantial net addition to farm income.

THE END.

PEACH APPLE TREES LOW AS 20¢

Cherries, Pears, Plums, Nut Trees, Strawberries, Blueberries, Dwarf Fruit Trees, Grapevines 10¢, Shrubs, Evergreens, Shade Trees, Boxes 25¢ up. Quality stock can't be beat. Write for FREE color catalog and \$2.00 FREE home information.

TENNESSEE NURSERY CO., BOX 4, CLEVELAND, TENNESSEE

T. B. West & Son

MAPLE BEND NURSERY
FRUIT TREES ORNAMENTAL
SMALL FRUIT PLANTS TREES AND SHRUBS
Also Dwarfs in the Popular Varieties

PERRY, OHIO



DWARF FRUIT TREES

Shrubs, Shade Trees, Perennials, etc.

BIG COLOR CATALOG FREE!

Dwarf Peach, Cherry, Apple, Pear trees, give fine crops on small land area and they're so EASY to care for and harvest! Over a dozen varieties of fruit including large July fruit within 2 years. Also a start of trees, grapes, berry plants, flowering shrubs, perennials, fast-growing trees. LIVE by buying DIRECT from nursery in business over 77 years. No obligation. Send postcard now for

KELLY BROS. NURSERIES
Dept. AFG-8
Dansville, N.Y.

FOR SALE:

650 acre sprinkler irrigated, established truck farm in coastal South Carolina with excellent farming background. Price of \$750 per acre includes owners home, tenant and packing houses, implement and storage sheds, repair shop, all mechanical equipment necessary for operation of this farm, 20 ton Flak-Ice plant, and 220 acres wooded land.

Brochure mailed to interested parties.

LOBECO FARM
Lobeco, South Carolina

Nostalgic Thoughts on Packages

REMEMBER the barrel, cut down on one side to make a most useful armchair? Remember the lace-covered vanity dresser made from the orange crate? Piled horizontal, they made good bookcases, and the barrel staves made excellent skis.

All this is gone! Now comes the Aqua-Pack for flowers, the Poly-Pack for cherries, ventilated picking lugs for strawberries, 18 - bushel crates, pallets, the bulk box dumper, polyethylene bags for apples and oranges. These are the items that fill the printed columns these days, all because Mrs. Housewife insists upon being served with a quality product, free of bruises, conveniently packaged.

What a change this is from the old apple barrel and the standard orange crate, and what a loss to the "do-it-yourself" fan. What can you make out of a fiber box? a polyethylene bag? a tin can? a carton? Maybe this is why the storekeeper gives stamps

and why many packages contain prizes.

Never mind, it's all a part of progress, and, anyway, who wants a home-made orange-crate vanity dresser when the next door neighbor has a brand new shining mirrored job from the shopping center received with purchase stamps?

Pick Your Own!

"PICK YOUR OWN" is gaining in popularity all over the country, so much so that helpful suggestions from operators are very much in order.

For example, Atherton Parsons, of Southampton, Mass., posts on his bulletin board:

Adults only in picking field.
Please be careful to walk in aisles.
Pick in quart baskets only.
Baskets may be purchased here for 2 cents each.
Bring berries to stand for settlement.
See sample baskets for fullness.
Heaped baskets 5 cents extra.

John Bell, of Barrington, Ill., says he feels he can dispose of 30,000 bushels of apples without a great deal of strain on a pick-your-own basis. A list of 3550 customers compiled from visitors to the orchard is the basis for a post-card reminder. Seventy per cent of those who come to pick are 50 years of age or older. Because of this, school children are being invited to see the orchard and even pick a bag of apples free.

The ideas that make this sort of thing work are legion. It is fun to pass them along. "Pick-your-own" looks like a business that's here to stay.

Fruit Growing is Such Fun!



Fruit Talk

Of the ten leading canned food items on sale in chain stores, amounting to a total \$2 billion, the leaders are **vegetables**—\$486 million, **coffee**—\$315 million, **fruits**—\$288 million, **meats**—\$162 million, and **juices**—\$162 million.

Says **Fred E. Motz**, America's fruit expert abroad, ". . . the average European is more conscious of eating quality than his or her North American counterpart . . . The Cox Orange Pippen is **nothing to look at**, yet it commands the highest price of any apple on the (London) market."

Tri-Valley Packing Association of California, the largest co-operative canning plant in the country carrying a general line of foods, boasts \$19.5 million in sales in 1956.

The elusive **Baldwin** spot (stippen) may be in for control, according to the suggestions from work of **Garman** and **Mathis** of Connecticut, showing that the trouble is induced by unbalance between calcium and magnesium and that application of **calcium salts** to the foliage in sprays helps to control it.

Warnings are out that stacks of **wooden pallets** are a **choice fire hazard**—the perfect kindling for a potential huge fire loss in the storage and the packing shed.

Collapsible tube-food, well known in Europe, is coming to America, including concentrated fruit juices, fruit syrups, and ice cream toppings—the last boasting 18 servings and no refrigeration needed.

Ogren and Scott of the **USDA** comment, "The outlook for marketing costs in the coming year is a continuation of the **steady rise** of recent years."

Beattie has shown in **Ohio** that foliar sprays of potassium are of value as a temporary measure for correcting **potassium deficiency** in apple trees.

The transportation of **cherries** in water rather than in lugs has introduced the problem of **how to weigh the fruit** for payment. **Gaston and Levin** of Michigan and the **USDA** have supplied a factor of **1% deduction for wet drained fruit**, after which one of several methods of weighing may be used successfully.

The **U.S. consumption of apples** has been **declining** at the rate of about 1 pound per person each year since 1920.

Food transportation charges, according to **Celia Sperling** of the **USDA**, cost Mrs. Housewife 8 cents for every dollar spent at the retail store, compared to 5.5 cents just 10 years ago.

Storage scald of **Cortland** apples has been materially reduced by spraying trees prior to harvest with 5% **mineral oil** according to **Shutak** and **Christopher** of **Rhode Island**.
—H.B.T.

Coming Next Month

- The Bonus Pay Plan for Pickers Reduces Bruising, Increases Profits
- Autumn Jobs for the Peach Grower
- Sweet Cherry Varieties
- How Paul Howard Saves Labor in His Pennsylvania Vineyard
- Growing Blight-Resistant Chestnuts
- Stopping the Virus Menace
- Soil Fumigation Makes Cherry Trees Grow Faster, Larger

A Bossless Union

EXCERPTS from a letter by Frank G. Hough, manager, Skookum Packers Association, Wenatchee, Wash., contained in the *Blue Goose Messenger*, say in part:

"An agricultural producer co-operative is to farmers what a trade union is to workers in industry. Both are organizations of the rank and file. The purpose of both is to better conditions for members.

"In the case of co-operatives, membership is voluntary. No one is compelled to join. Co-operatives manage and control their affairs by democratic processes. They are not subject to domination by any individual, or group. There is no such thing as a 'farm racketeer' in a producer co-operative. Members of a co-operative do not pay tribute for the privilege of farming. They are not taxed for slush funds, for the benefit of grafters or improper political purposes.

"The racketeer-type boss wouldn't understand how such an organization could exist, in the first place, or how HE could gain control of it and line his pockets with its funds. The answer is, HE COULDN'T!"

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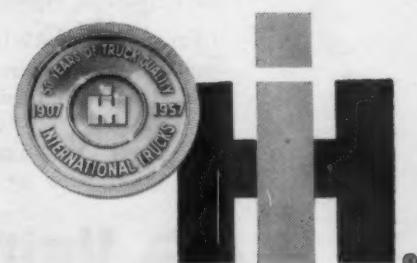
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